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## **(54) ALUMINUM NITRIDE CIRCUIT BOARD AND MANUFACTURE THEREOF**

(57)Abstract:

PURPOSE: To provide an aluminum nitride printed circuit board having a smooth surface on which very fine metallic wiring pattern is formed.

CONSTITUTION: A solution containing a silicon compound dissolved in ethyl Cellosolve is applied to an aluminum nitride substrate by spin coating. The coating is dried and heated, so that it becomes a silicon oxide film of 0.1-10 microns, preferably 0.3-5 microns. The silicon oxide film has an average surface roughness Ra ranging from 0.05 to 0.50 micron. When aluminum wirings are formed on the silicon oxide by sputtering, there is obtained a printed circuit board comprising the aluminum nitride coated with silicon oxide of 0.1-10 microns in thickness, which maintains a high thermal conductivity. The printed circuit board may have metallized wirings thinner than 80 microns, possibly 10 microns.

## **LEGAL STATUS**

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